

Cattle industry in Utah

"Our next story, class, deals with the livestock industry in Utah," Mr. Madsen stated. "Closely related to agriculture is stock raising. Since no more than three per cent of the land area of Utah is irrigated, the thousands of acres of arid land supply pasture. Thus crop production and livestock raising are carried on profitably together. Even the so-called deserts provide forage during the winter months, while the numerous mountain ranges provide good summer grazing lands."

"When did the cattle industry begin in Utah?" Helen Williams inquired.

"It began in 1847 with the arrival of the first pioneer companies. They

brought with them oxen, cattle, horses, mules, sheep, goats, pigs, and chickens. The founders soon learned that our state offered favorable conditions for the development of the livestock industry," Mr. Madsen replied.

"By fall of the first year the pioneers had brought 5,000 head of cattle into the Salt Lake Valley. As you recall, Farmington, Bountiful, and some of the other towns of Davis County were settled by herdsmen in search of pasture for their livestock. The same motive caused the settlement of Tooele and Grantsville two years later.

"The Utah settlers secured many head of cattle from emigrants who passed through Salt Lake on their way

White-faced Herefords and their calves being driven by Utah cowboys

Photo — courtesy Utah Publicity Dept.





Photo — courtesy Utah Publicity Dept.

A typical Utah fruit orchard in the springtime

days and cool nights, makes for the excellent texture and flavor of large and small fruits, melons, and berries in Utah. Also, the texture and chemical composition of the soil are important factors."

"I should like to ask, sir, which parts of the state produce the most fruit?" Mary McDonald inquired.

"The main fruit belt in Utah today is found on the bench lands close to the mountains. The most important fruit-producing regions are Box Elder, Weber, Davis, Salt Lake, Utah, and Washington counties.

"During the past few years, however, many orchards have been replaced by subdivisions to take care of Utah's rapidly increasing population. It will be necessary in the future to plant new areas in the state to fruit, if we are go-

ing to raise enough to supply the needs of its people," the instructor declared.

Thinking, Remembering, and Discovering

1. Describe the farming activities of a pioneer family. Tell about the crops and animals.
2. Name the different sugar substitutes that were used by the pioneers.
3. Tell why the following dates are important ones for the sugar industry in Utah: 1851, 1852, 1853, 1855, 1891, 1902, 1907, 1932.
4. Make a chart that will show the different agricultural crops and the areas where they are grown in Utah.
5. What are the determining factors in deciding which crops can be grown in Utah?

to Oregon or California. In this way they increased their herds. So rapid was the growth of the cattle industry in the Territory that in 1856 one mercantile firm of Salt Lake City sent 700 head to California as partial payment on a debt. Bancroft states that in the eighties the cattle industry had an estimated value of \$4,800,000.

"During the first century in Utah, church herds of cattle and sheep, cooperatively owned community herds, as well as hundreds of individually owned herds contributed toward making the settlers self-sustaining and prosperous.

"As early as 1890 the cattle range was rather fully occupied. It has been estimated that there were 160,000 range cattle at that time."

"Did we really have cowboys in Utah in those days?" John Brown — an Easterner — asked.

"Yes, John, lots of them; and we still do have a number of men that could be called cowboys. In several areas there are ranchers who make their living from their range cattle. Their helpers are cowboys.

"You may be even more interested to know that during the latter part of the past century, Utah actually had a band of outlaws. Their hideouts were in Brown's Hole and Robber's Roost, in eastern Utah. As one writer stated, 'There the dying glow of the frontier lit eastern and south-eastern Utah through the final years of the century.'

"These outlaws were cattle rustlers. They would go out on the range, round up herds of cattle, and drive them off into Colorado to be shipped to market. And then the rustlers would disappear into the badlands, where no one could follow them. Large cattle companies were the chief victims of these outlaws. Benjamin Argyle and Benjamin Eldredge, owners of two of Utah's largest

herds of livestock, ran their animals in the Green River region. The cattle rustlers finally forced them out of business," said Mr. Madsen.

"Cattle raising has remained one of the important industries in Utah even to the present time. In 1940 the beef cattle totaled 332,000 head, more than a 100% increase over 1890. They were valued at more than \$16,000,000. During the summer months, 108,515 head grazed on the United States Reserve. The rest were either fed or pastured on farms, or grazed on private ranges.

"Twelve years later (1952) there were 633,000 head of range cattle in Utah, valued at \$95,290,000. This was slightly less than twice as many cattle as the 1940 figure, but nearly six times the value. This big increase in value was caused primarily from the rise in market prices. Between 1939 and 1954 the value of cattle and calves in Utah increased 338.3%.

"In 1956 Utah marketed 202,000 head of cattle in comparison to 96,000 in 1925. This was 110% increase. The chart I have on the board shows that the greatest increases in the number of cattle marketed have occurred since 1940."

FARM INCOME IN UTAH, 1925 TO 1956

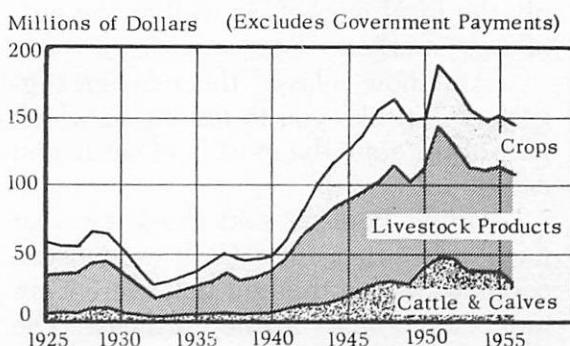


Chart — courtesy Bureau of Economic & Business Research, U. of U.

"The income from cattle marketing in 1936 was \$5,700,000, or 11% of the total farm income. Since 1950 the sale of cattle and calves has produced nearly

\$39,000,000 annually, or an average of 25% of Utah's farm income.

"The yearly income from marketing of beef cattle and calves in Utah ranges between \$40,000,000 and \$50,000,000, dependent upon the market prices of beef and veal throughout the country. The 1958 figure was over \$49,000,000, it being the highest year. With the prospects of population growth so favorable in the Rocky Mountain states, the cattle industry should also see steady growth.

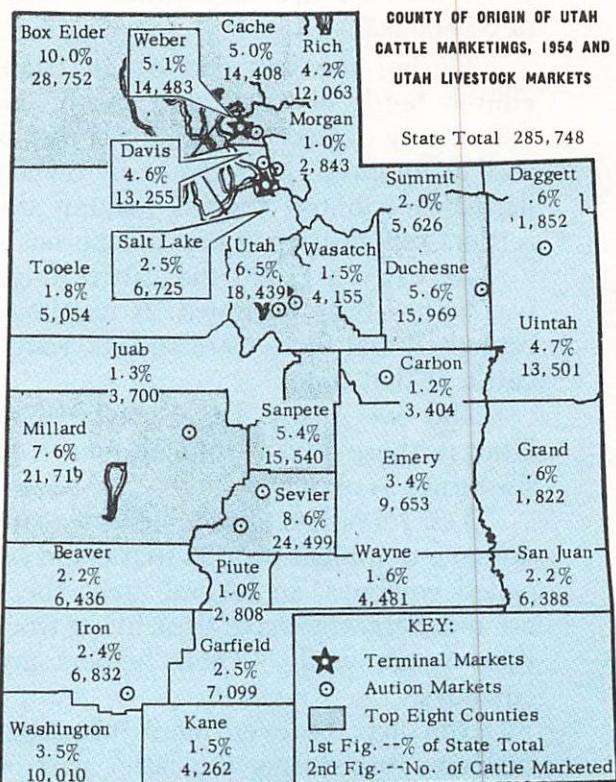
"The most important use of public lands has been for the support of Utah's cattle and sheep industries. In 1958 over 50% of Utah's cattle and 90% of her sheep were grazed on public lands.

"Many of these cattle and sheep are brought to the valley farms in the fall for feeding, especially for 'topping off' purposes, after normal crops have been harvested. Sugar beet tops and pulp are utilized. Other farm and orchard wastes are conserved. Late in the fall about 18% of alfalfa crops are pastured by the cattle. This saves the effort and expense of harvesting. Later during the fall and winter months the livestock are fed grain and hay to prepare them for the market. Numerous hogs are also raised and fattened on the Utah farms to supply the local market, as well as the out-of-state market.

"And now, class," the teacher suggested, "I'd like you to tell me in which part of the state the most beef cattle and calves are raised?"

Nadine Poulsen said she knew that part of southeastern Utah was cattle country. Sharon thought that there were more range lands in the northeast. The teacher settled the question. "Actually, class, only eight of the 29 counties claim more than five per cent of Utah's cattle marketing. Box Elder is the leading cattle-producing county, with nearly ten per cent of the marketing; Sevier Coun-

ty is second, with nine per cent; and Millard County third, with eight per cent. Utah and Duchesne counties each produce six per cent, while Sanpete, Weber, and Cache counties produce five per cent each. This next chart will show Utah's cattle marketing in 1954."



Map — courtesy Bureau of Economic & Business Research, U. of U.

Packing industry in Utah

"High class beef cattle are raised in all portions of the state. Many of these are slaughtered and packed in Utah plants and others are shipped to markets in the East or on the Pacific Coast," declared Mr. Madsen.

Ned inquired, "How long have there been meat-packing plants in Utah?"

"Oh, the meat-packing industry began in our state as early as 1860. In that first factory the pioneers smoked bacon and ham to be sold on the market.

"But it was not until refrigeration came into common use during this cen-

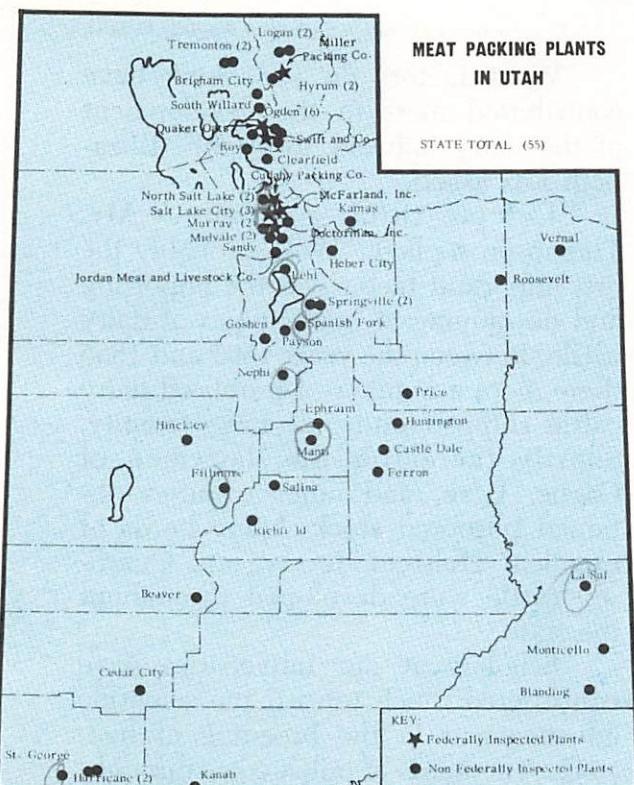
Year	Cattle	Calves	Sheep and Lambs	Hogs and Pigs	Total
1948	94,697	6,834	8,724	42,469	152,724
1949	100,274	7,098	13,981	56,701	178,054
1950	104,762	5,966	15,682	56,259	182,669
1951	98,513	4,163	20,571	60,266	183,513
1952	99,197	4,160	23,014	60,727	187,098
1953	141,315	4,570	24,758	54,104	224,747
1954	158,153	5,228	35,971	51,152	250,504
1955	165,576	4,948	42,574	58,085	271,183

SOURCE: University of Utah Bureau of Economics and Business Research.

tury that the meat-packing industry has become one of Utah's important industries. In 1939 the annual pack was worth nearly \$9,000,000.

"Now, students," the teacher pointed out, "the general trends of the livestock and the meat-packing industries in Utah are shown by this table, which indicates that the livestock slaughtered in the state has increased greatly from 1948 to 1955."

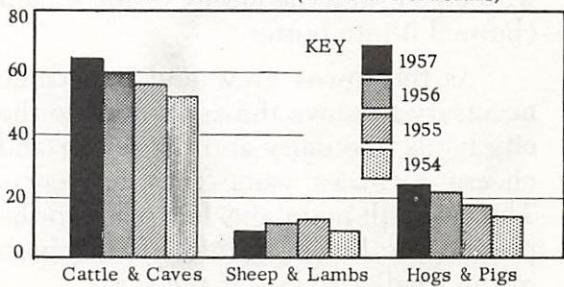
Map — courtesy Bureau of Economic & Business Research, U. of U.



"Meat processing is now Utah's largest food processing industry. Between 1946 and 1957, the number of cattle processed increased from 125,000 to 195,000 head, an increase of 56%. Nationally the increase was only 37% during the same period.

"I imagine that you already know that two of the oldest and largest commercial meat-packing houses in Utah are the Cudahy Packing Company, located in North Salt Lake, and the Swift and Company plant in Ogden. In 1957, there were a total of 36 packing establishments in Utah. They employed 1,300 workers with an annual payroll of \$6,500,000. In addition to this, the meat-packing industry supplies meat products for about 850 retail markets in Utah. This industry employs 2,600 persons, with an annual payroll of nearly \$9,000,000. And so you see, students, meat packing has become an industry of great importance in our state," the teacher concluded.

LIVESTOCK SLAUGHTER, UTAH JANUARY TO APRIL TOTALS (Thousands of Pounds)



Source: U.S. Department of Agriculture

PERCENTAGE OF MEAT PACKING DONE BY MOUNTAIN STATES, 1954

State	Value of Products	Per cent of Total
Mountain States	\$370,827	100.0%
Colorado	227,786	61.0
Utah	56,952	16.0
Arizona	24,170	6.4
Idaho	21,144	5.7
Montana	20,579	5.5
New Mexico	11,468	3.1
Nevada	5,345	1.4
Wyoming	3,381	.9

Source: United States Bureau of the Census, Census of Manufactures, Statistics by Industry, 1954, Vol II (Washington: Government Printing Office), p. 20 A-5.

Dairy industry in Utah

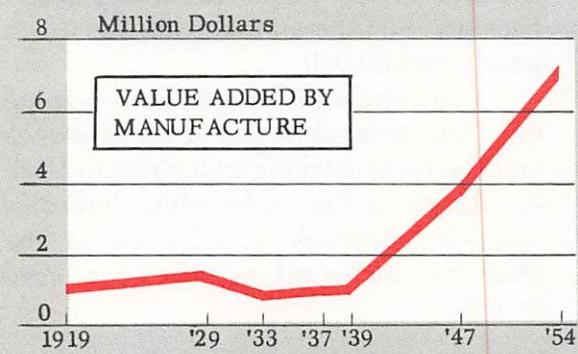
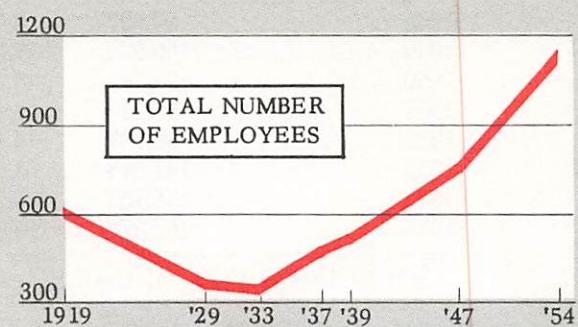
"Since dairying is the next part of our story, class, Mr. Gregory Thompson, who owns a large dairy herd and whose plant furnishes a large portion of the milk, butter, cottage cheese, and other products for the city, has generously accepted our invitation to talk to us here today," Mr. Madsen stated. "Mr. Thompson, will you please tell the class about dairying in Utah?"

"Dairying, one of Utah's important industries," he began, "has always played a vital part in the economy of our state."

"From the beginning of Utah history, the milch cow was one of the most important of domestic animals. Every family owned one or more to furnish milk, butter, and cheese. In pioneer days the butter was made in the old-fashioned dash churn. Sometimes before the family left for a trip, they filled the churn with cream, and the jolting of the wagon churned it into butter."

"As the towns grew and it became necessary to move the cows outside the city limits, the dairy and the butter and cheese factories came into existence. The cow still maintains her place to the present day, however, in the family barn in the smaller towns of the state."

GROWTH OF UTAH'S MEAT PACKING INDUSTRY



Courtesy Bureau of Economic & Business Research, U. of U.

"What factors do you think have contributed most to the development of the dairy industry in Utah?" Elizabeth Fox asked.

"Let me think a minute," Mr. Thompson replied. "Well, probably the first important factor was the importing and developing of better types of dairy cattle. Between the years 1865 and 1885 there were a number of purebred dairy cattle shipped into Salt Lake County. Shortly thereafter the dairymen of Cache, Utah, and other counties obtained purebred stock. Many herds of excellent Holstein, Jersey, and Guernsey cattle were developed throughout the state."

"Scholars at our universities have contributed much toward the scientific advancement in the breeding of livestock. The herds of milch cows through-

out the state are far superior today to those even at the beginning of this century. Many of these herds are composed entirely of purebreds.

"Incidentally, although this is not on the subject of dairying, we should note at this point that herds of purebreed beef cattle, as well as dairy cows, are commonly found throughout the state.

"The second important factor in stimulating the dairy industry of Utah came in 1904 when the first evaporated milk plant was established at Richmond. Other factories were built as the years passed. Today the Sego Milk factory at Smithfield is one of the largest in America. In 1939 the business of condensing milk produced an income of \$3,000,000 in Utah.

"Third, in 1924 the first cooperative dairy association in our state was organized. Such associations have contributed

greatly to dairying in marketing the dairy products.

"Soon after the organizing of the first cooperative dairy association, Pacific Coast markets were opened to Utah dairymen by cheap and fast motor-truck transportation. Since 1943, the rapidly increasing population in Utah has also provided a greater market for dairy products. Thus markets for disposing of dairy products is a fourth factor in the development of this industry in our state.

"And fifth, the development of such industries as making butter, cheese, and ice cream on a large scale for out-of-state markets has stimulated the dairy industry greatly," said Mr. Thompson.

Michael Hamilton raised his hand. "I would like to ask another question about dairying, sir. How important has the dairy industry become in Utah?"

Dairy herd and farm

Photo — courtesy Utah Publicity Dept.

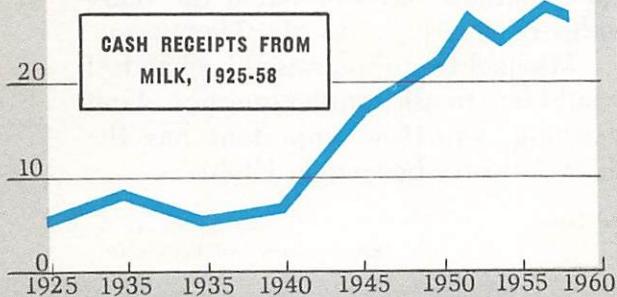


"Well, I would say that the dairy industry has steadily pushed ahead and has become one of Utah's important agricultural industries," the dairyman replied. "In some sections it has assumed the importance of a specialty. All dairy herds are headed by blooded sires, and, as we suggested, a large portion of the dairy stock is registered. In 1952 the total milch cow population of Utah was 110,000 head, valued at \$24,420,000. Two years later (1954) there were 115,-

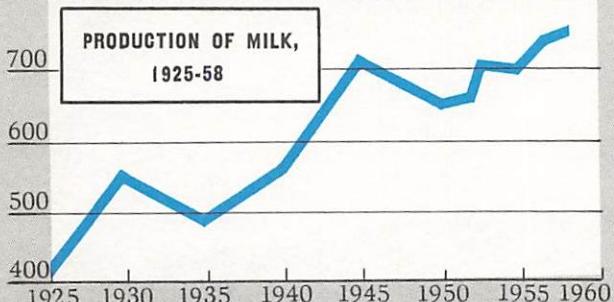
Courtesy Bureau of Economic & Business Research, U. of U.

UTAH MILK TRENDS

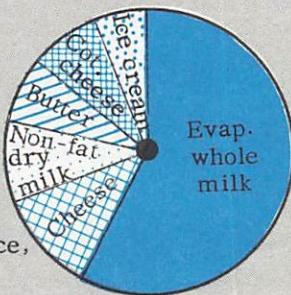
30 Million Dollars



800 Million Pounds



MANUFACTURED MILK PRODUCTS, 1958



Source:

United States Department of Agriculture, Agricultural Marketing Service, Salt Lake City.

000 milch cows in the state. And the milch cow population has remained over 100,000 since that date.

"Milk production has not only been increased during the past few years in quantity, but it has also been improved in quality. The average milch cow in the United States produces 190 pounds of butter fat in a year; the average cow in Utah produces 213 pounds of butter fat. But the average cow owned by members of the Dairy Herd Improvement Association produces about 340 pounds.

"A few statistics," said Mr. Thompson, "should help to give us a better understanding and appreciation of the importance of the dairy industry in Utah. The value of the dairy products of our state in 1939 was \$4,685,978. In 1954 it had increased to \$18,407,437, or 292.8%.

"Part of the milk production is, of course, used as milk. The rest is processed into powdered milk, butter, cheese, ice cream, and condensed milk. In 1953, 60,994,000 pounds of evaporated milk were canned, most of it for outside markets. The production of butter was 5,683,000 pounds, that of American and Swiss cheese was 11,849,000 pounds, and that of cottage cheese 4,898,000 pounds. Whole milk production was 696,000,000 pounds.

"Another half million dollar income each year is received from the sale of dairy cows to the California markets. Also, most of the male calves are sold for meat.

"The latest figures available on the dairy industry are the 1964 reports. They indicate that there were 8,000 Utah dairy farms, with more than 90,000 milch cows which produced 753,000,000 pounds of milk that year. About 20% of it was made into cheese. To conclude my discussion of the dairy indus-



Photo — courtesy Salt Lake City Chamber of Commerce

Herd of sheep pasturing in Utah highlands

try in Utah," Mr. Thompson went on, "I shall quote from an article in the *Deseret News*, December 16, 1959, written by Welby W. Young, President of American Dairy Association of Utah:

'In the fabulous years ahead, cow numbers may not increase, but applied genetics and nutritive knowledge will change the unusual annual production of 12,000 pounds of milk per cow to the usual. The unusual will exceed 30,000 pounds per cow. . . . Utah's \$45,000,000 annual dairy income from sale of milk and meat will increase.'

"Thank you, Mr. Thompson, for the excellent information you have given us. I'm sure the class found it very interesting," said Mr. Madsen.

Sheep industry in Utah

"We shall now turn our attention to the sheep industry," stated the instructor. "The raising of sheep in Utah began with the early groups of pioneer settlers. Nearly 1,000 head were brought into the Salt Lake Valley in 1848. About 20 years later sheep were brought into Utah in large numbers. Herds of Spanish Merinos were imported from California and fine grade wool rams were brought from Ohio. Long-wooled animals were brought into Utah from other sections of the country also, with the result of greatly improving the wool-producing flocks. By 1933 there were

450,000 sheep in Utah, which averaged about five pounds of wool per head.

"Toward the close of the last century and early in this century, sheep became so numerous that thousands of them were trailed to Omaha, Nebraska, during the spring and summer over the Oregon and Mormon trails. B. F. Saunders and M. R. Parsons, both Utah men, were important livestock buyers. It was their custom to purchase early in the springtime as many as 200,000 wethers and trail them to Omaha," the teacher explained.

"Sheep raising has developed into a very important industry in Utah. I have asked Linda to give us a report on its development during our century. Linda, you may now give your report," stated the teacher.

"Since the latter part of the last century," Linda began, "Utah breeders have made the greatest contribution to the advancement of the range sheep industry in the West. They have established high quality purebred herds of Rambouilletts.

"Mr. Seeley, who lived in Mt. Pleasant, became one of the greatest sheep raisers of the West. At first his herd was composed of the old Mexico Merino type, which produced a very poor quality of wool. However, Mr. Seeley traveled to California to buy purebred Rambouilletts. Later he sent to France and Germany for still better ones. He and other breeders, such as John K. Madsen and W. D. Candal, both of Mt. Pleasant, and Wilford Day of Parowan, did much toward the development of the sheep industry in Utah.

"Largely as a result of their work, the weight of the average fleece for the state at the present time is nearly 10 pounds. This is a full pound more than the national average.

"In 1930 Utah rated seventh in sheep production in the United States. Twenty-seven per cent of the purebred Rambouillet sheep in our nation were in our state. In 1932 there were 2,755,000 head of sheep in Utah. They grazed over much of the semi-arid land that could not support cattle or horses. Utah's wool crop in 1938 had a value of \$3,783,000, ranking fifth in the nation in production. In 1941 her production totaled 20,106,000 pounds, with 32 cents the average price paid per pound. This brought the sheepmen of Utah a cash income of \$6,434,000. In 1945 Utah ranked fifth among all the states in the marketing of both wool and lambs.

"Here are some more figures relative to sheep raising," said Linda. "The total number of sheep in the state in 1952 was 1,528,000 head. They were valued at \$26,848,000. In 1954 there were 1,383,000 sheep, valued at \$21,436,000. Between 1940 and 1950 Utah had an increase of 43.6% in wool production in comparison with 35.8% in the United States as a whole. In 1954 the wool production was sold for \$5,819,313, and the sheep and lambs of Utah were valued at \$25,034,262.

"Over 15% of the nation's sheep are raised in Utah. The value of the sheep industry at the present time (1960) is about the same as it was in 1954," concluded Linda.

Chicken industry in Utah

"Closely related to dairying, class, is the raising of chickens and turkeys in various parts of the state," said Mr. Madsen. "I have asked Edward to report on the chicken industry."

"In early days," Edward began, "the majority of the families had small flocks in their yards to produce eggs and meat for their homes. However, there was little effort made to develop the poultry

industry on a commercial scale until 1922. Utah was still importing eggs for local needs in certain parts of the state until that date.

"A cooperative marketing association known as the Utah Poultry Producer's Association was organized in 1923. This group was responsible for the great growth made in the poultry industry from that date to the present time. By 1930 there were 2,125,723 chickens in Utah. By the time the association had been operating 10 years, the number of chickens had increased 122%.

"The 1935 census showed that Salt Lake County ranked eighth among the counties of the United States in egg production and Utah county ranked 14th. These two counties produced about half of the state's egg crop. Utah ranked sixth in the United States in average number of chickens per farm and produced an average of 995 dozens of eggs per farm. Only three other states in the Union were higher than Utah.

"Our state became famous for its production of 'Milk White Eggs.' Through the poultry association, eggs are shipped as far as the Atlantic Coast and westward to the Pacific Coast. According to the estimate of the Bureau of Agriculture Economics of the United States Department of Agriculture, only six other states shipped more eggs to New York City than Utah during the years 1937-1938. This gives an idea of the value of cooperative marketing in shipping eggs over such great distances.

"The poultry industry has grown rapidly in Utah during the past 30 years. In 1945 Utah produced \$18,820,775 worth of poultry and poultry supplies and products. During the same year, 399,444 cases of Utah's famous 'milk-white' eggs were shipped out of the state. According to the U. S. Census of Agriculture, between the dates of 1940

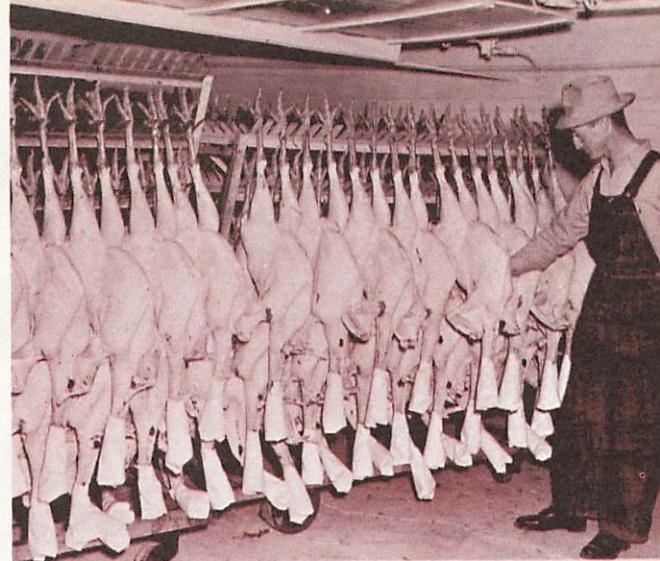


Photo — courtesy Utah Publicity Dept.
Cooling room at turkey processing plant in Monroe

and 1950, poultry and poultry products increased 2,182.8% in this state and only 228% in the nation. The largest poultry processing plant in the West is operated in Salt Lake City; and the Utah Poultry and Farmer's Cooperative is the nation's third largest poultry co-op. At the present time (1960), Utah's chicken industry is still thriving," Edward reported.

Turkey industry in Utah

"Turkey production also is increasing very fast in our state. It is becoming Utah's leading poultry industry," declared Mr. Madsen. "Sharon Kenney is going to report on Utah's turkey industry."

"Thirty-five years ago (1925), the turkey industry was in its infancy," she began. "Within a few years its growth was so great that it received national prominence. These birds grow very well in the high mountain valleys of our state. About Thanksgiving time each year, most of the Utah turkeys are shipped to eastern markets.

"The United States Census reports 228,483 turkeys in Utah in 1930. Ten years later the number had increased to 812,078, which amounts to nearly 300% increase during that decade. But the



Photo — courtesy Utah Publicity Dept.

Turkey ranch in Utah

growth of the industry was even more rapid during the next two years. In 1941 Utah produced about 1,000,000 turkeys, with an estimated 200,000 head increase in 1942. Thus the increase in two years was nearly another 50%.

"Approximately 16,000,000 pounds of turkey meat were shipped from the state in 1942. The turkey growers received an average of about 33 cents per pound after deducting the cost of marketing the meat. This brought a net income of \$5,280,000. This cash income is in addition to the approximate 500,000 pounds of turkey meat, worth an additional \$165,000, consumed by the people of Utah.

"Students, the production of high-grade turkeys has become a most important factor in the poultry industry

in Utah. In 1945 the state ranked sixth among all the states in the nation in the marketing of turkeys, and since that time, our state has retained that position.

"During the past two or three years, the Utah turkey industry has really boomed. In 1959 there were 2,271,000 turkeys produced in the state, which brought an income of nearly \$10,000,000. Of this number, 90% were shipped out of the state to find their places on tables throughout the world. Utah's modern Broad-breasted Bronze turkey is the best type of turkey produced anywhere. Our turkeymen find a ready sale for all the birds they produce," Sharon explained.

"May I ask a question, Sharon? In which part of the state are the turkeys raised?" Tom Bennett inquired.

"Sanpete County grows more turkeys than the other counties," she replied. "In 1959 over 1,000,000 turkeys were raised there. The turkeys brought the people of Sanpete in excess of \$4,000,000. Sanpete also ranks in the top 10 counties in the United States in turkey production.

"Other Utah counties which produce large numbers of turkeys are Box Elder, Cache, Davis, Salt Lake, Utah, Juab, Sevier, and Washington.

"There are seven major plants in Utah in which turkeys are processed for the market. Two are in Ogden, and one each in Salt Lake City, Nephi, Moroni, Salina, and St. George.

"Some individual turkey growers in Utah raise as many as 35,000 to 50,000 birds each year. For example, Deloris Leo Stokes in Tremonton raised 50,000 turkeys in 1960.

"Furthermore, he and others have a turkey hatchery in which they hatch many thousands of turkeys for the Utah farmers, as well as additional thousands to ship throughout the United States. Turkey hatching is a rather new phase of the industry. The percentage of eggs that hatch is higher than in most places in the United States. This new phase is even more profitable than merely raising the birds for meat, because after the incubating season is over the turkeys that had produced the eggs are now put on the market for meat," Sharon pointed out.

"How do you account for the fact that the turkey industry has grown so rapidly and become such a great industry in Utah?" Barbara Thomas wanted to know.

"Utah's climate, Barbara, is most favorable for all phases of the turkey industry," Mr. Madsen replied. "Increased

knowledge of proper diet has produced birds of unusual size. Some of them weigh as much as 50 pounds. Utah's Broad-breasted Bronze turkey has been developed. It has a maximum amount of meat, and so Utah turkeys have become very popular on the markets throughout the nation.

"Knowledge of how to conquer and avoid the diseases which formerly wiped out complete flocks of turkeys has made the industry less of an economic risk.

"The last reason that I shall mention for the rapid growth of the turkey industry in Utah is the efficiency of the marketing organization. Salt Lake City is the headquarters for the Norbest Turkey Growers Association. It is the largest cooperative turkey marketing organization in the United States. Under its direction, the Utah turkey industry has a bright future."

Livestock industry — Conclusion

"A few figures, class members, should help us to understand better the great growth that has been made by the poultry industry in Utah since its establishment on a commercial basis in 1922. The sale from poultry and poultry products in 1939 was \$5,013,977; in 1942, \$11,070,000; in 1954, \$18,820,775; in 1957, \$22,326,000; and in 1958 it reached the great sum of \$24,423,000.

"The income from livestock and live-stock products increased from \$34 million in 1940 to \$143 million in 1951, the year of highest income to date.

"The total income for crops and live-stock in 1957 was \$163,737,000; in 1958 it was \$166,881,000.

"Authorities on this subject agree that Utah will experience an even greater growth in agricultural products during the coming years," the teacher concluded.

Thinking, Remembering, and Discovering

1. What factors have made stock raising so very important in Utah?
2. Write a story that will tell of the activities of a cattle grower or a sheepman through the four seasons.
3. From the library find material and prepare a report on Butch Cassidy, one of the last of the cattle rustlers.
4. List the factors that have stimulated the rapid growth of the dairy industry in Utah.
5. Name the milk products that are produced in Utah.
6. What is meant by purebred and registered livestock? How has animal breeding helped the livestock industry?
7. The farmers of Utah are producing more meat, milk, eggs, and other dairy products than can be used in the state. Where are the surplus foods marketed? What has made this possible?
8. Make a chart that will show the different types of livestock and the areas where they are raised in Utah.
9. Prepare a graph that will show the value of the different agricultural products for the year 1959.
10. Invite a farmer, rancher, or dairyman to visit your class and talk to you about his work.

Hereford cattle produced in Utah for beef

Photo — courtesy Utah Publicity Dept.

